Notice of Allowability	Application No.	Applicant(s)	
	10/679,635	SIEVERT, JAMES A.	
	Examiner	Art Unit	
	Li B. Zhen	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment submitted on 05/07/2007 and interview on 5/22/2007*.

2. ☒ The allowed claim(s) is/are *1-5,7,9-16,18 and 20-24, now renumbered as claims 1-20*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *20070522* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. LeRoy D. Maunu on 22 May 2007.

The application has been amended as follows:

a. Replace claims 1, 11, 12, 22 and 23 with the following:

1. A processor-implemented method for exposing an application object model to web-based clients, comprising:

parsing each hyper-text transport protocol (HTTP)-form-processing request received from a client by a web server;

traversing objects in the application object model in response to each property names obtained from the HTTP-form-processing request;

wherein traversing includes comparing a property name from the request to a property name of an object defined in the application object model;

for a reference-type property of an object found in traversing the application object model, generating a unique identifier for the reference-type property, registering

the unique identifier for the reference-type property in a collection, and returning a Uniform Resource Identifier (URI) that includes the unique identifier to the client;

maintaining each identifier in the collection according to a lifetime type associated with each identifier, wherein a short-lifetime type reference is controlled by client access to the short-lifetime type reference, and a long-lifetime type reference is controlled by an application object; and

returning to the client a value of a selected property of an object in the application object model in response to traversal of the application object model.

11. The method of claim 1, further comprising:

configuring the web server arrangement with an initial object name associated with a name of an application object model; and

retrieving an object definition of the initial object name in response to the name of the application object model obtained from an HTTP-form-processing request.

12. A computing arrangement for exposing objects to web-based clients, comprising:

a web server arrangement that includes a data processing system configured with a web server;

an application object model hosted by the web server, the application object model containing the objects to be exposed;

a web objects model hosted by the web server, the web objects model configured to parse each hyper-text transport protocol (HTTP)-form-processing request

received from a client by a web server, traverse objects in the application object model in response to property names obtained from the HTTP-form-processing request, wherein traversing includes comparing a property name from the request to a property name of an object defined in the application object model, generate, for a reference-type property of an object found in traversing the application object model, a unique identifier for the reference-type property, registering the unique identifier for the reference-type property in a collection, and return a Uniform Resource Identifier (URI) that includes the unique identifier to the client, maintain each identifier in the collection according to a lifetime type associated with each identifier, wherein a short-lifetime type reference is controlled by client access to the short-lifetime type reference, and a long-lifetime type reference is controlled by an application object, and return to the client a selected property of an object in the application object model in response to traversal of the application object model.

22. The arrangement of claim 12, further comprising:

an initial object name associated with a name of an application object model in the web server; and

wherein the web objects model is further configured to retrieve an object definition of the initial object name in response to the name of the application object model obtained from an HTTP-form-processing request.

23. An apparatus for exposing an application object model to web-based clients, comprising:

one or more data processing systems;

means for parsing each hyper-text transport protocol (HTTP)-form-processing request received from a client by a web server process hosted on the one or more data processing systems;

means for traversing objects in the application object model in response to property names obtained from the HTTP-form-processing request and for comparing a property name from the request to a property name of an object defined in the application object model as part of the traversing; and

means for generating, for a reference-type property of an object found in traversing the application object model, a unique identifier for the reference-type property, registering the unique identifier for the reference-type property in a collection, and for returning a Uniform Resource Identifier (URI) that includes the unique identifier to the client;

means for maintaining each identifier in the collection according to a lifetime type associated with each identifier, wherein a short-lifetime type reference is controlled by client access to the short-lifetime type reference, and a long-lifetime type reference is controlled by an application object; and

means for returning to the client a selected property of an object in the application object model in response to traversal of the application object model.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior art of record does not expressly teach or render obvious the invention as recited in independent claims 1, 12 and 23.

The prior art of record teaches a system for exposing an application object model to web-based clients [col. 4, line 61 - col. 5, line 5 of Mein] by traversing objects in the application object model [col. 6, line 58 - col. 7, line 10 of Mein], comparing a property name from the request to a property name of an object defined in the application object model [col. 5, lines 39 – 52 of Mein], generating a unique identifier for a reference-type property of a object found in traversing the application object model [col. 300, lines 50 – 58 of Smith162], registering the unique identifier for the reference-type property in a collection [col. 882, lines 27 – 45 of Smith162], returning a Uniform Resource Identifier (URI) that includes the unique identifier to the client [col. 526, lines 3 – 18 and col. 529, lines 6 – 26 of Smith162]. However, the prior art does not disclose maintaining each identifier in the collection according to a lifetime type associated with each identifier, wherein a short-lifetime type reference is controlled by client access to the short-lifetime type reference and a long-lifetime type reference is controlled by an application object.

In addition, the prior art of record does not provide a basis of evidence for asserting a motivation that one of ordinary skill level in the art at the time the invention was made would have integrated or modified the system for exposing an application object model to include the features of maintaining each identifier in the collection according to a lifetime type associated with each identifier, wherein a short-lifetime type

reference is controlled by client access to the short-lifetime type reference and a long-lifetime type reference is controlled by an application object as recited in the context of independent claims 1, 12 and 23.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONTACT INFORMATION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Li B. Zhen
Examiner
Art Unit 2194

LBZ

5/23/2007